

Model KB 115 | Refrigerated incubators with powerful compressor cooling

The most versatile among the refrigerated incubators for microorganisms: The BINDER KB series refrigerated incubator controls temperature ranges of -10 °C to 100 °C. With its comprehensive program functions, this refrigerated incubator offers a wide range of capabilities and delivers reproducible test results.

BENEFITS

- Safe, reproducible incubation, even at high ambient temperatures
- Disinfection routine at +100 °C
- Up to 30% lower energy consumption compared to the previous model







Model 115

IMPORTANT FEATURES

- Temperature range: -10 °C to +100 °C
- APT.line™ preheating chamber technology
- Up to 30% lower energy consumption compared to the Stackable previous model
- · Refrigeration with compressor refrigerated unit
- Adjustable fan speed
- Controller with time-segment and real-time programming
- Inner door made of tempered safety glass
- 2 stainless steel racks
- - Class 3.1 independent temperature safety device (DIN 12880) with visual and acoustic alarm
 - Computer interface: Ethernet

ORDERING INFORMATION

| Interior volume | | Power supply - unit fuse | Plug* | Version | Model version | ArtNo. |
|-----------------|-----|--------------------------|-----------|----------|---------------|-----------|
| [L] | [L] | | | | | |
| Model KB 115 | | | | | | |
| 115 | | 230 V 1~ 50 Hz -10,0 A | CEE 7/7 | Standard | KB115-230V | 9020-0397 |
| | 115 | 120 V 1~ 60 Hz -12,5 A | NEMA 5-15 | Standard | KB115UL-120V | 9020-0398 |



TECHNICAL DATA

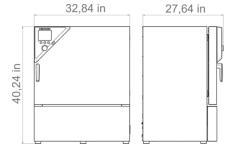
| | ECHNICAL DATA | | | | |
|---|---------------|--------------|--|--|--|
| Data | | | | | |
| Designation | KB115-230V | KB115UL-120V | | | |
| Article Number | 9020-0397 | 9020-0398 | | | |
| Option model | Standard | Standard | | | |
| Performance Data Temperature | | | | | |
| Temperature range | -10100 °C | -10100 °C | | | |
| Temperature uniformity at 37°C | 0.2 ± K | 0.2 ± K | | | |
| Temperature fluctuation at 37°C | 0.1 ± K | 0.1 ± K | | | |
| Max. heat compensation at 40°C | 210 W | 210 W | | | |
| Recovery time after door was opened for 30 s at 37°C | 2 min | 2 min | | | |
| Electrical data | | | | | |
| Rated Voltage | 230 V | 120 V | | | |
| Power frequency | 50 Hz | 60 Hz | | | |
| Nominal power | 0,7 kW | 0,7 kW | | | |
| Unit fuse | 10,0 A | 12,5 A | | | |
| Phase (Nominal voltage) | 1~ | 1~ | | | |
| Measures | | | | | |
| Interior volume | 115 L | 115 L | | | |
| Net weight of the unit (empty) | 106 kg | 106 kg | | | |
| Load per rack | 20 kg | 20 kg | | | |
| Permitted load | 50 kg | 50 kg | | | |
| Wall clearance back | 100 mm | 100 mm | | | |
| Wall clearance sidewise | 100 mm | 100 mm | | | |
| Housing dimensions not incl. fittings and connections | | | | | |
| Width net | 835 mm | 835 mm | | | |
| Height net | 1,025 mm | 1,025 mm | | | |
| Depth net | 650 mm | 650 mm | | | |
| Internal Dimensions | | | | | |
| Interior width | 600 mm | 600 mm | | | |
| Interior height | 480 mm | 480 mm | | | |
| | | | | | |



| Interior depth | 400 mm | 400 mm | | | | |
|-------------------------------|---------------------------|----------|--|--|--|--|
| Inner doors | 1 | 1 | | | | |
| Unit doors | 1 | 1 | | | | |
| Environment-specific data | Environment-specific data | | | | | |
| Sound-pressure level | 49 dB(A) | 49 dB(A) | | | | |
| Energy consumption at 37°C | 75 Wh/h | 75 Wh/h | | | | |
| Fixtures | | | | | | |
| Number of shelves (std./max.) | 2/5 | 2/5 | | | | |

All technical data is specified for unloaded units with standard equipment at an ambient temperature of $\pm 20^{\circ}$ C $\pm 3^{\circ}$ C and a power supply voltage fluctuation of $\pm 10^{\circ}$ %. The temperature data is determined in accordance to BINDER factory standard following DIN 12880, observing the recommended wall clearances of 10 % of the height, width, and depth of the inner chamber. Technical data refers to 100 % fan speed. All indications are average values, typical for units produced in series. We reserve the right to change technical specifications at any time.

DIMENSIONS Incl. fittings and connections [mm]



OPTIONS

| Designation | Description | KB 115 | * | ArtNo. |
|--------------------------------|-------------|--------|----|-----------|
| | back | | | |
| | 10 mm | • | 01 | 8012-0395 |
| | 30 mm | • | 01 | 8012-1292 |
| | 50 mm | • | 01 | 8012-1294 |
| | left | | | |
| access port with silicone plug | 10 mm | • | 01 | 8012-0393 |
| | 30 mm | • | 01 | 8012-1157 |
| | right | | | |
| | 10 mm | • | 01 | 8012-0392 |
| | 30 mm | • | 01 | 8012-1154 |
| | top | | | |



| Designation | Description | KB 115 | * | ArtNo. |
|--|--|--------|----|-----------|
| | 10 mm | • | 01 | 8012-0391 |
| | 30 mm | • | 01 | 8012-1151 |
| | 50 mm | • | 01 | 8012-1160 |
| | 100 mm | • | 01 | 8012-1167 |
| Alarm output, zero-voltage | for temperature (± 2 °C), accessible via 6-pin DIN socket (max. 24 V - 2.5 A), with audible signal that can be switched off | • | - | 8012-1082 |
| Calibration certificate, expanded | for temperature; for extending the measurement in center of chamber to include another test temperature | • | - | 8012-1120 |
| | for temperature, measurement in center of chamber at specified temperature | • | - | 8012-1139 |
| Calibration certificate, | temperature measurement incl. certificate, 9 measuring points at specified temperature | • | - | 8012-1556 |
| temperature | temperature measurement incl. certificate, 15- 18 measuring points at specified temperature | • | - | 8012-1577 |
| | temperature measurement incl. certificate and 27 measuring points at specified temperature | • | - | 8012-1598 |
| Class 3.3 independent temperature safety device | with visual alarm (DIN 12880) | • | - | 8012-1080 |
| Door lock | lockable door handle | • | - | 8012-1773 |
| Pt 100 temperature sensor | additional flexible Pt 100, interior, for displaying the temperature on the unit display | • | - | 8012-1078 |
| Shelf, reinforced | positioned at bottom level, max. load 45 kg, with additional attachment for operation of shaking device, stirring device or roller bottle system | • | - | 8012-0288 |

ACCESSORIES

| Designation | Description | KB 115 | * | ArtNo. |
|----------------|---|--------|---|-----------|
| | Multi Management Software APT-COM™ | | | |
| APT-COM™ 4 | version 4, BASIC edition | • | - | 9053-0039 |
| | version 4, GLP edition | • | - | 9053-0042 |
| | version 4, PROFESSIONAL edition | • | - | 9053-0040 |
| | Basic set consisting of 2 pieces, attachment material, control unit for max. 4 light strips, 100-240 V, $50/60~\text{Hz}$ | | | |
| | Basic set 300, length 30 cm | • | - | 8012-1107 |
| .ED light bars | Basic set 500, length 50 cm | | - | 8012-1108 |
| | Expansion set consisting of 2 pieces, attachment material: clips. For expanding the basic set of light bars | | | |
| | Expansion set 300, length 30 cm | • | - | 8012-1716 |



| Designation | Description | KB 115 | * | ArtNo. |
|--|---|--------|---|-----------|
| | Expansion set 500, length 50 cm | • | - | 8012-1717 |
| | IQ/OQ/PQ documents – supporting documents for validation performed by customers, according to customer requirements, PQ section added to qualification folder IQ/OQ; parameters: temperature, ${\rm CO_2}$, ${\rm O_2}$ – or pressure, depending on unit | | | |
| | Digital in PDF format | • | - | 7057-0005 |
| Qualification documents | Hard copy inside folder | • | - | 7007-0005 |
| Qualification documents | IQ/OQ documents – supporting documents for validation performed by customers, consisting of: IQ/OQ checklists incl. calibration guide and comprehensive unit documentation; parameters: temperature, CO ₂ , O ₂ , pressure, depending on unit | | | |
| | Digital in PDF format | • | - | 7057-0001 |
| | Hard copy inside folder | • | - | 7007-0001 |
| Rack | stainless steel | • | - | 8012-2048 |
| Rack, reinforced stainless steel, with fasteners (1 set of 4) | | • | - | 8012-0700 |
| Rack accessories fasteners (1 set of 4) for additional security of racks | | • | - | 8012-0531 |
| Rubber pads set anti-slip feet | | • | - | 8012-2030 |
| Shelf, perforated | Stainless steel | • | - | 8012-2161 |
| Table on castors | Table on castors stable cart, casters with locking brakes, dimensions: W 1,000 x D 800 x H 780 mm | | - | 9051-0018 |
| The kit contains a client bridge that establishes a wireless connection between BINDER units and APT-COM4, LIMS, or customer-specific software via an Ethernet interface. It provides an WLAN kit alternative solution in situations where units need to be positioned in locations without an onsite Ethernet connection. In secured networks, installation and configuration must be performed by the customer's IT service. | | • | - | 8012-2262 |
| pH-neutral detergent | concentrated, for gentle remove of residual contaminants; 1 kg | • | - | 8012-2250 |

SERVICES

| Designation | Description | * | ArtNo. | | | | |
|--|--|---|-----------|--|--|--|--|
| Calibration services | Calibration services | | | | | | |
| | Calibration of one (1) test temperature specified by the user in center of chamber, including certificate Travel to be quoted separate. | - | DL30-0101 | | | | |
| Temperature calibration | Extension of calibration of one (1) additional test temperature specified by the user in the center of the usable space, including certificate Travel to be quoted separate. | - | DL30-0102 | | | | |
| Temperature measurement, 9 measuring points | Temperature measurement with 9 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 3 shelves are required. | - | DL30-0109 | | | | |
| Temperature measurement, 18 measuring points | Temperature measurement with 18 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 2 shelves are required. | - | DL30-0118 | | | | |



| Designation | Description | * | ArtNo. |
|--|---|---|-----------|
| Temperature measurement, 27 measuring points | Temperature measurement with 27 measuring points with a set value specified by the user, including certificate. Travel to be quoted separate. A total of 3 shelves are required. | - | DL30-0127 |
| Installation services | | | |
| Unit installation | Connect the unit to the customer-side connections (electricity, water, wastewater, gas), basic functions check, brief operating instructions. (excl.: unpacking, setup, controller instructions, programming, installation work) Travel to be quoted as separate. | - | DL10-0100 |
| Unit instructions | Instruction regarding operating principle and basic functions of the unit, operation of the control electronics including programming. Travel to be quoted as separate Limited to 3 hours. | - | DL10-0500 |
| Maintenance services | | | |
| BRONZE 3-year maintenance contract | Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate. 10% Discount on Spare Parts and Labor for any additional Services needed Wear + tear parts to be purchased or billed to customer. Travel to be quoted as separate. | - | DL20-0710 |
| GOLD 3-year maintenance contract | Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate of Temperature. 25% Discount on Spare Parts and Labor for any additional Services needed. One additional courtesy visit per year can be used for service visit or operator. Wear + tear parts to be purchased or billed to customer. Travel to be quoted separate. | - | DL20-0910 |
| Preventive maintenance | One-off maintenance service in accordance with maintenance schedule. Visual inspection of mechanical and electrical components, testing of all key functions. Checking a test temperature specified by the user in center of usable space without certificate. Wear + tear parts need to be purchased or billed to customer. Travel to be quoted as separate. | - | DL20-0200 |
| SILVER 3-year maintenance contract | Annual Device Inspection Includes Preventive Maintenance with Calibration Certificate 15% Discount on Spare Parts and Labor for any additional Services needed One additional courtesy visit per year can be used for service visit or operator training. Wear + tear parts to be purchased or billed to customer. Travel to be quoted separate. | - | DL20-0810 |
| Validation services | | | |
| Execution of IQ/OQ | Execution of IQ/OQ in accordance with qualification folder. Travel to be quoted separate. | _ | DL41-0200 |
| Execution of IQ/OQ/PQ | Execution of IQ/OQ/PQ in accordance with qualification folder. Travel to be quoted separate. | - | DL44-0500 |
| Warranty service | | | |
| 1-year warranty extension | The warranty is extended by 1 year from the delivery date, wear parts are excluded | - | DL50-0010 |



NOTES

O1 Condensation may occur in the area around the access port. Access ports may be placed in custom locations for an additional charge.

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